

Application/Control Number: 10/007,743

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Art Unit: 2611

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1. A digital satellite broadcast receiver which comprises :

an antenna for receiving a satellite signal ;

a tuner for tuning the satellite signal received by the antenna;

a modulator which modulates the satellite signal tuned by the tuner into digital signal;

an error corrector which corrects a position error of the satellite antenna using the signal modulated by the modulator, and outputs a corresponding output signal;

a microprocessor which receives the signal modulated by the modulator and the output signal of the error corrector, and outputs a control signal which controls the position of the antenna; and

an antenna driver which drives the antenna in accordance with the control signal of the microprocessor.

2. The digital satellite broadcast receiver of claim 1, wherein the modulator comprises:

an analog-to-digital converter which converts the analog satellite signal into a digital signal ;

a demodulator which is connected to the analog-to-digital converter and demodulates the digital signal.

3. The digital satellite broadcast receiver of claim 1, wherein the antenna driver generates develops a pulse having a predetermine period and on which movement of the antenna is based, the pulse driving the antenna

4. The digital satellite broadcast receiver of claim 3, wherein the antenna driver comprises:

a control logic which transmits the control signal of the microprocessor;

a motor for driving the antenna in accordance with the control signal of the microprocessor received from the control logic;

a power supply which supplies the power to the motor.

Claims 5-21 (Canceled)

22. A method for receiving digital satellite broadcast comprising steps of:

setting moving limits of a satellite antenna;

detecting satellites by measuring a magnitude of a signal received by the satellite antenna by changing a direction of the satellite antenna;

confirming verification information of a desired satellite;

setting the direction of the satellite antenna by correcting a position error;

comparing the verification information of the desired satellite with verification information of the detected satellite;

changing the direction of the satellite antenna if the verification information of the desired satellite does not correspond to the verification information of the detected satellite; and

storing the position and the verification information of the detected satellite if the verification information of the desired satellite corresponds to the verification information of the detected satellite.

23. The method for receiving digital satellite broadcast of claim 22, wherein the step of detecting satellites by measuring the magnitude of the signal received by the satellite antenna is performed by measuring an AGC level and a noise level.

24. The method for receiving digital satellite broadcast of claim 23, wherein the step of detecting satellites by measuring the AGC level and the noise level comprises the steps of :

receiving signals from satellites by changing the direction of the antenna;

estimating whether the AGC level of the signal received by the satellite antenna is maximum or whether the noise level of the signal received by the satellite antenna is minimum;

changing the direction of the satellite antenna if the AGC level of the signal received by the satellite antenna is not maximum and if the noise level of the signal received by the satellite antenna is not minimum; and

discontinuing the changing of the direction of the satellite antenna if the AGC level of the signal received by the satellite antenna is maximum or if the noise level of the signal received by the satellite antenna is minimum.

25. The method for receiving digital satellite broadcast of claim 22, wherein the verification information of the desired satellite and the detected satellite includes transponder information and channel information.

26. The method for receiving digital satellite broadcast of claim 22, wherein the correction of the position error in the step of setting the direction of the satellite antenna is performed with a FEC decoder.

Claims 27-28 (Canceled)

29. The method for receiving digital satellite broadcast of claim 22, further comprising step of detecting satellites by repeating the steps of claim 22.

30. The method for receiving digital satellite broadcast of claim 22, further comprising steps of:

determining a position information of a satellite using position information pre-stored in a microprocessor; and

finding the desired satellite using the position information of the microprocessor.

Claims 31-41 (Canceled)